

### **AMENDMENTS TO THE CLAIMS**

Please amend the claims as follows:

#### **Listing of Claims:**

Claim 1 (Currently Amended): A transmission system configured to transmit IP data packets, comprising:

an IP network;

a protected network protected by a firewall configured to block incoming traffic to the protected network;

a first IC-breaker; and

a second IC-breaker; wherein

said first and second IC breakers are configured to open the firewall to allow the IP data packets to be transferred through the firewall to the protected network;

said first IC-breaker is located on a IP network side of the firewall and the second IC-breaker is located on a protected network side of the firewall, and said firewall is transparent to a particular type IP data packet, configured to communicate between said first and second IC-breakers through the firewall by using said particular type IP data packet;

said first IC-breaker is configured to receive the IP data packets from the IP network, the IP data packets intended for the protected network, and said first IC-breaker is configured to send the particular type IP data packet to said second IC-breaker after reception of the particular type IP data packet; and

said first IC-breaker is further configured to open the firewall for a time period at reception of a returned particular IP data packet from the second IC-breaker, and said returned particular IP data packet is sent before the firewall opens through the firewall to the second IC-breaker, and the second IC-breaker is configured to send the particular type IP data packet to the protected network after receiving the particular type IP data packet; and

said particular IP data packet is a ping-packet,  
wherein said second IC-breaker is configured to identify a size of the ping-packet received from a sender in a form of an IC-breaker, said size being indicative of a type of packet which has been received and a port via which it was received.

Claim 2 (Cancelled).

Claim 3 (Previously Presented): The transmission system according to Claim 1, wherein said firewall is configured to be transparent to IP-communication through the firewall from a protected network side to an IP network side thereof, and, during the time period, open to IP-communication through the firewall from the IP network side to the protected network side thereof.

Claim 4 (Previously Presented): The transmission system according to Claim 1, wherein said first IC-breaker is configured, on receipt of an IP data packet, to store said particular type IP data packet and to send said stored IP data packet through the firewall to the second IC-breaker, when the firewall has been opened.

Claim 5 (Cancelled).

Claim 6 (Previously Presented): The transmission system according to Claim 1, wherein said protected network is a Local Area Network.

Claim 7 (Previously Presented): A transmission system, as claimed in claim 1, wherein said system is an Asynchronous Transfer Mode ATM transmission system, configured to transmit IP data packets, using ATM as a carrier network.

Claim 8 (Currently Amended): A method for using a transmission system transmitting IP data packets from an IP-network to a protected network protected by firewall, said method comprising:

receiving and storing an IP data packet by a first IC-breaker located on an IP-network side of the firewall;

transmitting the IP data packet by said first IC-breaker to a second IC-breaker located on a protected network side of the firewall through the firewall, on receipt of a particular type IP data packet;

opening the firewall by said particular type IP data packet for a period of time while awaiting receipt of said particular type IP data packet from said second IC-breaker;

sending said stored IP data packet through the open firewall to said second IC-breaker; and

identifying by said second IC-breaker a size of the particular type IP data packet received from said first IC-breaker, said size being indicative of a type of IP data packets which have been received and a port via which the data packet was received; wherein

said particular type IP data packet is a ping-packet.

Claim 9 (Cancelled).

Claim 10 (Currently Amended): The method according to Claim 8, further comprising:

~~identifying by said second IC-breaker a size of the particular type IP data packet received from said first IC-breaker, said size being indicative of a type of IP data packets which have been received and a port via which the data packet was received;~~

returning the particular type IP data packet from said second IC-breaker to said first IC-breaker, thereby opening the firewall for the period of time;

awaiting reception, by said second IC-breaker, of said IP data packet for the protected network sent from said first IC-breaker, during said period of time the firewall is open; and

sending the received IP data packet to the protected network by said second IC-breaker.

Claim 11 (Previously Presented): The method according to Claim 8, wherein said protected network is a Local Area Network.

Claim 12 (Previously Presented): The method according to Claim 8, wherein said transmission system is an Asynchronous Transfer Mode ATM transmission system, configured to transmit IP data packets, using ATM as a carrier network.

Claim 13 (Currently Amended): An apparatus configured to provide access to a firewall protected network, comprising:

means for opening the firewall to enable IP data packets to be transmitted through the firewall to said protected network, wherein said means for opening the firewall includes a first and second IC-breaker located on opposite sides of said firewall, and wherein

said firewall is configured to allow IP-traffic from a protected side thereof to another side, and communication between said first and second IC-breakers using a Ping service, a

response to said Ping service opening the firewall for transmission of IP data packets to said protected network;

wherein said second IC-breaker is configured to identify a size of a ping-packet used by the Ping service received from a sender in a form of an IC-breaker, said size being indicative of a type of packet which has been received and a port via which it was received.

Claim 14 (Previously Presented): The apparatus according to Claim 13, wherein the first IC-breaker, located on an IP-network side of said firewall, is configured to:

store IP data packets destined for the protected network;  
send ping-packets to the second IC-breaker through the firewall;  
await receipt of a returned ping-packet from the second IC-breaker, said returned ping-packet opening the firewall for a period of time; and  
send said stored IP data packets through the open firewall to said second IC-breaker.

Claim 15 (Cancelled).

Claim 16 (Previously Presented): The apparatus according to Claim 13, wherein the first IC breaker is located on an IP-network side of the firewall and that the second IC-breaker is located on the protected network side of the firewall, wherein said first IC-breaker is configured to receive and store IP data packets destined for the protected network, wherein said first and second IC breakers are configured, on receipt, by said first IC-breaker, of a IP data packet for the protected network, to communicate with each other, through the firewall, using ping-packets, one of said ping-packets returned by said second IC-breaker to said first IC-breaker opening the firewall for this type of traffic, and wherein said first IC-breaker is configured, on receipt of the returned ping-packet, to send IP data packets through the opened

firewall to the second IC-breaker, and wherein said second IC-breaker is adapted, on receipt of said IP data packet, to send the received packets to the protected network.

Claim 17 (Currently Amended): The apparatus as claimed in claim 13 ~~An IC-breaker adapted for use with apparatus as claimed in claim 13~~, wherein said IC-breaker includes:

means for transmitting ping-packets to at least one of the first or second IC-breaker, located behind a firewall;

means for storing received IP data packets;

means for detecting receipt of said IP data packets from within said firewall; and

means, operative in response to receipt of IP data packets, to transmit stored IP data packets.

Claim 18 (Currently Amended): The apparatus as claimed in claim 13 ~~An IC-breaker configured to be used with apparatus as claimed in claim 13~~, wherein said IC-breaker includes:

means for identifying a received ping-packet and determining an associated IP data packet type thereto;

means for transmitting IP data packets of said associated IP data packet type through the firewall;

means for receiving the IP data packets transmitted through said firewall; and

means for distributing at least one of said IP data packets to a predetermined address.

Claim 19 (Currently Amended): A transmission system configured to transmit IP data packets, said system including:

an IP-network protected by a firewall;

means for opening the firewall to enable IP data packets to be transmitted through the firewall to said protected network, wherein said means for opening the firewall includes a first and second IC-breaker located on opposite sides of said firewall, and wherein

said firewall is configured to allow IP-traffic from a protected side thereof to another side, and communication between said first and second IC-breakers using a Ping service, a response to said Ping service opening the firewall for transmission of IP data packets to said protected network;

wherein said second IC-breaker is configured to identify a size of a ping-packet used by the Ping service received from a sender in a form of an IC-breaker, said size being indicative of a type of packet which has been received and a port via which it was received

~~, wherein said system includes an apparatus as claimed in claim 13.~~

Claim 20 (Cancelled).

Claim 21 (Previously Presented): A transmission system configured to transmit IP data packets, said system comprising:

an IP network;

a protected network protected by a firewall configured to block incoming traffic to the protected network;

a first IC-breaker; and

a second IC-breaker; wherein

said first and second IC breakers are configured to open the firewall to allow the IP data packets to be transferred through the firewall to the protected network; wherein

said first IC-breaker is located on a IP network side of the firewall and the second IC-breaker is located on a protected network side of the firewall, and said firewall is transparent

to a particular type IP data packet, configured to communicate between said first and second IC-breakers through the firewall by using said particular type IP data packet;

said first IC-breaker is configured to receive the IP data packets from the IP network, the IP data packets are intended for the protected network, and said first IC-breaker is configured to send the particular type IP data packet to said second IC-breaker after reception of the particular type IP data packet;

said first IC-breaker is further configured to open the firewall for a time period at reception of a returned particular IP data packet from the second IC-breaker, and said returned particular IP data packet sent before the firewall opens through the firewall to the second IC-breaker, and the second IC-breaker is configured to send the particular type IP data packet to the protected network after receiving the particular type IP data packet; and

said second IC-breaker is configured to identify a size of the particular type IP data packet received from a sender in a form of an IC-breaker, said size is indicative of a type of packet which has been received and a port via which the particular type IP data packet was received.

Claim 22 (Previously Presented): A method for using a transmission system transmitting IP data packets from an IP-network to a protected network protected by firewall, said method comprising:

receiving and storing an IP data packet by a first IC-breaker located on an IP-network side of the firewall;

transmitting the IP data packet by said first IC-breaker to a second IC-breaker located on a protected network side of the firewall through the firewall, on receipt of a particular type IP data packet;



opening the firewall by said particular type IP data packet for a period of time while awaiting receipt of said particular type IP data packet from said second IC-breaker;

sending said stored IP data packet through the open firewall to said second IC-breaker;

identifying by said second IC-breaker a size of the particular type IP data packet received from said first IC-breaker, said size being indicative of a type of IP data packets which have been received and a port via which the data packet was received;

returning the particular type IP data packet from said second IC-breaker to said first IC-breaker, thereby opening the firewall for the period of time;

awaiting reception, by said second IC-breaker, of said IP data packet for the protected network sent from said first IC-breaker, during said period of time the firewall is open; and

sending the received IP data packet to the protected network by said second IC-breaker.

Claim 23 (Currently Amended): Apparatus for providing access to a firewall protected network, comprising:

means for opening ~~the~~ a firewall to enable IP data packets to be transmitted through the firewall to said protected network, wherein said means for opening the firewall includes a first and second IC-breaker located on opposite sides of said firewall;

wherein said firewall is configured to allow IP-traffic from a protected side thereof to another side, and communication between said first and second IC-breakers use a ping service, a response to said ping service opening the firewall for transmission of IP data packets to said protected network;

wherein the second IC-breaker, located on the protected network side of the firewall is configured to:

identify a size of a ping-packet received from the first IC-breaker, said size being indicative of the type of packet which has been received and a port via which the ping-packet was received;

return the ping-packet to the first IC-breaker, which opens the firewall for a period of time;

await receipt, from the first IC-breaker, of said IP data packet for the protected network during said period of time said firewall is open; and

send the received IP data packets to the protected network.

Claim 24 (Previously Presented): A transmission system according to Claim 1, wherein said period of time is at least a duration of a transmission of the IP data packets through the firewall by said first or second IC breaker.

Claim 25 (Previously Presented): A transmission system according to Claim 8, wherein said period of time is at least a duration of a transmission of the IP data packets through the firewall by said first or second IC breaker.

Claim 26 (Previously Presented): An apparatus for providing access to a firewall protected network according to Claim 14, wherein said period of time is at least a duration of a transmission of the IP data packets through the firewall by said first or second IC breaker.

Claim 27 (Currently Amended): A transmission system according to Claim 1, wherein said ~~particular type IP data~~ ping-packet is an internet control message protocol packet ICMP.

Claim 28 (Currently Amended): A transmission system according to Claim 8,  
wherein said ~~particular type IP data~~ ping-packet is an internet control message protocol  
packet ICMP.